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PROJECT NO. 52373

REVIEW OF WHOLESALE MARKET § PUBLIC UTILITY COMMISSION
DESIGN § OF TEXAS

SOUTH TEXAS ELECTRIC COOPERATIVE, INC.'S
MARKET REDESIGN COMMENTS

TO THE HONORABLE PUBLIC UTILITY COMMISSION OF TEXAS:

South Texas Electric Cooperative, Inc. (“STEC”) submits the following recommendations to the Public Utility Commission of Texas (“PUCT” or “Commission”). A bulleted, executive summary of STEC’s recommendations is included as Attachment A.

In 2017, as the Commission considered how to ensure adequate system reserves, STEC provided comments that remain relevant today:

“Texas citizens are not willing to accept shortages in energy. In a functioning market they should not have to do so. Responsible market participants that have sought to protect against declining reserve margins by retaining capacity are penalized in doing so and unable to use those resources when needed to avoid rolling outages despite having made the investment in generation resources. Customers are not given the opportunity to decide whether they are willing to pay for capacity to avoid disruption, and those that do avoid disruption do so without a premium and at the expense of smaller, non-transmission voltage customer classes.”¹

Improving the ERCOT market design to ensure adequate reserves and resilience is imperative to avoiding future events of catastrophic outages. Over the past decade, the ERCOT market has seen a dramatic decline in investment in dispatchable generation. Suppressing prices by lowering the system-wide offer cap (“SWOC”) to \$4,500/MWh, as proposed by the Commission in Project No. 52631, will only exacerbate the exit of generation from the market. The principals of the energy-only market rely on scarcity pricing and accurate market signals.

¹ *Project to Assess Price Formation Rules In ERCOT's Energy-Only Market*, Docket No. 47199, STEC’s Reply Comments (Dec. 22, 2017).

Artificially lowering the SWOC without implementing a minimum reserve capacity requirement, or without a fundamental restructuring of the Operating Reserve Demand Curve (“ORDC”) mechanism, will result in less dispatchable generation, a less reliable system, and less investment in the Texas energy market. This runs counter to legislative directives to ensure that more dispatchable generation is ready and available to Texans when extreme weather conditions arise. STEC makes the following recommendations for market design improvements:

1. **Ancillary Services & Emergency Response Services**

Ancillary service (“AS”) products should incentivize development of a diverse generation fleet and should be priced at levels that provide financial incentives for generation to provide AS. Having a diverse generation fleet is important for reliability because each type of technology brings distinct operational benefits. It is critical that market policies and operational standards work in tandem to foster investment in dispatchable generation and ensure system reliability. Dispatchable generation is particularly important. As traditional, dispatchable generation continues to exit the market, the need for synchronous generation increases and should be financially incentivized. The provision of inertia and energy below the low sustainable limit (“LSL”) of a generation unit are examples of uncompensated/under-compensated reliability benefits that are provided by synchronous generation resources. Tens of thousands of megawatts of generation, either quick start generation resources or generators operating at their low sustainable limit (“LSL”), provide a free call option to the market on this under-compensated generation. This free call option keeps the grid stable by providing a ramping service to consistently and continuously increase or decrease generation in response to large swings in net load. No other type of generation can perform this service, and it should be compensated for the value that it brings. Reliability products should capture the economic value of all reliability services needed for a well-functioning system.

Recommendations:

- Prioritize maintaining fleet diversity and in particular dispatchable generation in the development of new AS products.
- Develop an AS product to capture the value of inertia, including for inertia from units generating at their LSL.
- Develop an AS product to capture the value of ramping capability to address net load swings.
- Evaluate administrative pricing adders and AS including AS qualification criteria, quantities, and pricing structures, to incentivize dispatchable generation.
- Ensure that AS and all reliability services are available when deployed and their deployment can be sustained for reasonably long periods of time.
- The cap for Emergency Response Service (“ERS”) should not be increased.
- The ERS framework offers adequate incentives for maintaining availability and being capable of performing when called upon.
- ERCOT should review compliance metrics for ERS availability and event-based performance and consider strengthening these metrics.

2. Price Signals

As the ERCOT market faces continuing challenges with a diminished portfolio of dispatchable generation resources, it is increasingly important that the market send accurate price signals that will encourage new entry into the market and sustain existing resources that are dispatchable. A certain amount of market risk and price volatility must be present in an energy-only market for the market to sustain generation. If the market is overly mitigated, the energy-only market does not achieve the pricing levels necessary to keep generation that is needed for reliability in the bid stack, resulting in the use of further out of market measures to keep needed generation with inadequate market signals for new generation. Out-of-market actions harm in-market investment, undermine investor confidence, leads to a circular need for more out-of-market actions, and threatens the stability of the market and the long-term reliability of the grid.

Recommendations:

- Refrain from reducing the HCAP without corresponding reforms to the ORDC. A decision to reduce the HCAP/VOLL would need to be accompanied by a shift in the LOLP of greater than 1.0 standard deviation and an increase in the MCL to at least 2,800 MW, because the current ORDC and VOLL do not support existing or new dispatchable generation.
- Evaluate changes to the HCAP, VOLL, SWOC, or the ORDC as part of a larger holistic study of the ERCOT energy-only market, scarcity pricing, and the impact on dispatchable generation.
- Implement an administrative intermittent price adder that captures the cost of backstopping intermittent generation with thermal generation.
- Ensure that market changes prioritize accurate scarcity pricing to incent needed generation and ensure that the ERCOT system remains reliable in a manner consistent with the principles of an energy-only market.
- Consider an ORDC price adder mechanism for localized constraints that reflects gradual rises in prices (along a pre-ordained curve) as the transfer limitation into the pre-determined locally constrained region is approached. A locational reserve requirement could help send price signals to locations where generation and demand response is needed.
- Implement marginal losses with a single, dynamic reference bus against which other transactions would be measured and with excess revenues returned only to the loads that pay the Four Coincident Peak (“4CP”) TCOS allocation.

3. Reliable and Dispatchable Generation

Today, very few entities carry any reserves at all because the market does not incent reserve capacity purchases. If a load does carry reserves, it is penalized for doing so—both by market prices and because in an emergency situation, that load is not able to keep its reserves for itself. To ensure adequate capacity in the market, the Commission should establish a reliability benchmark prior to making changes to the existing market design. The need for a benchmark is even more crucial in a deregulated market to ensure that needed power is available. The public reaction that has occurred in the past when curtailments have been necessary should confirm the need for the mandate. STEC urges the Commission to continue to require the reliability standard of a 1-in-10 event which has long been used by ERCOT, and is used industry-wide in other

markets, to determine the reserve margin necessary to ensure reliability. A lesser standard will undermine the support for a competitive market and result in ERCOT falling further behind in reliability from reserve capacity when compared with other states.

Recommendations:

- Institute a firming requirement that is market-based for reserve capacity for mandatory, seasonal reserve requirements needed to support reliability.
- Incentivize capacity reserves for market participants.
- Honor planned outage schedules to ensure generation resources are able to conduct needed maintenance.

4. Transmission Cost Allocation Methodology

The factors that drive transmission build are no longer the four Coincident Peaks (“4CP”), but congestion that can occur at any time of day. The 4CP time periods are no longer the period where the grid experiences scarcity pricing—which now occurs when renewable generation is low so that “net load,” total load less renewable generation, is the highest. The 4CP also does not accurately assign costs for the use of the transmission system, given that customers that use transmission all year long, but avoid using it on the 4CP intervals, do not pay for transmission.

Recommendations:

- Transition away from the 4CP methodology that incentives cost-avoidance and places an unequal financial burden on residential ratepayers.

STEC appreciates the Commission’s review of these important issues and respectfully requests the Commission’s consideration of these recommendations.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Diana Liebmann".

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ELECTRIC COOPERATIVE, INC.**

STEC'S MARKET REDESIGN EXECUTIVE SUMMARY

Ancillary Services & Emergency Response Services

- Prioritize maintaining fleet diversity and in particular dispatchable generation in the development of new AS products.
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- Ensure that AS and all reliability services are available when deployed and their deployment can be sustained for reasonably long periods of time.
- The cap for Emergency Response Service (“ERS”) should not be increased.
- The ERS framework offers adequate incentives for maintaining availability and being capable of performing when called upon.
- ERCOT should review compliance metrics for ERS availability and event-based performance and consider strengthening these metrics.

Price Signals

- Refrain from reducing the HCAP without corresponding reforms to the ORDC. A decision to reduce the HCAP/VOLL would need to be accompanied by a shift in the LOLP of greater than 1.0 standard deviation and an increase in the MCL to at least 2,800 MW, because the current ORDC and VOLL do not support existing or new dispatchable generation.
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Reliable and Dispatchable Generation

- Institute a firming requirement that is market-based for reserve capacity for mandatory, seasonal reserve requirements needed to support reliability.
- Incentivize capacity reserves for market participants.
- Honor planned outage schedules to ensure generation resources are able to conduct needed maintenance.

Transmission Cost Allocation Methodology

- Transition away from the 4CP methodology that incentivizes cost-avoidance and places an unequal financial burden on residential ratepayers.